

## CONFIGURABLE METROLOGY DEVICE THAT OPERATES IN REFLECTANCE MODE, TRANSMITTANCE MODE, OR MIXED MODE

James M. Holden

5

### ABSTRACT

A metrology system includes a sample holder and a backside reflective element. The backside reflective element causes light that is transmitted through the sample to be reflected and transmitted a second time, in the opposite direction, through the sample. A variable collection range can be adjusted to place the sample, the reflective element or both within the collection range. The collection range is the range of focused light that will be detected. The system can be controlled to move one or both of the sample and the reflective element in or out of the collection range or to alter the optics to adjust the collection range so that one or both of the sample and reflective element are in the collection range. Thus, the metrology system can be configured to operate in reflectance mode, transmittance mode or a mixed reflectance/transmittance mode.